United Nations E/CN.3/2009/16

Economic and Social Council

Distr.: General
12 December 2008

Original: English

Statistical Commission
Fortieth session
24-27 February 2009
Item 3 (m) of the provisional agenda*
Items for discussion and decision: development indicators

Report of the Secretary-General on the indicators for monitoring the Millennium Development Goals

Report of the Secretary-General

Summary

The present report describes the work of the Inter-Agency and Expert Group on Millennium Development Goals Indicators and the United Nations Statistics Division, in its capacity as coordinator of the group, undertaken in 2008, in the following areas: improvement of the coverage, transparency, and reporting on all indicators as presented in the database on all Millennium Development Goals; review of the data and indicators with a view to developing a monitoring mechanism that adequately monitors progress towards all goals and the implementation of all commitments; implementation of the recommendations contained in Economic and Social Council resolution 2006/6 on strengthening statistical capacity, adopted in July 2006, and those agreed by countries that are members of the Inter-Agency and Expert Group; and coordination of data gathering and compilation at the global level and preparation of the yearly analysis and progress reports on the Millennium Development Goals. The Commission is invited to comment on progress made by the Inter-Agency and Expert Group on Millennium Development Goals Indicators and the United Nations Statistics Division and on the proposed steps and future directions of work.

* E/CN.3/2009/1.

08-64578 (E) 311208

I. Introduction

1. Since 2005, when the Statistical Commission, at its thirty-sixth session, expressed concerns regarding the ability of countries to produce the necessary data (not imputations by international agencies) and reviewed and discussed issues related to discrepancies and serious inconsistencies between national and international sources, the Inter-Agency and Expert Group on Millennium Development Goals Indicators, and the United Nations Statistics Division, in its capacity of coordinator, have devoted increased attention to the improvement of data and reporting systems on the Millennium Development Goals. After 2006, the Inter-Agency and Expert Group also undertook specific steps to implement the recommendations of the Friends of the Chair on Millennium Development Goal indicators (see E/CN.3/2006/15) and those contained in Economic and Social Council resolution 2006/6 on strengthening statistical capacity.

2. Moreover, at its thirty-ninth session, the Commission requested the Inter-Agency and Expert Group to give greater consideration to the need for improving the capacity of countries to produce the indicators and develop specific recommendations in this regard and to submit them to the Statistical Commission at its fortieth session. Also, the Commission requested the Inter-Agency and Expert Group and all bodies involved to increase efforts to further improve the indicators of all Millennium Development Goals through methodological and technical refinements.[1]

3. The present report outlines the progress made to address all concerns raised and details the activities undertaken for the improvement of Millennium Development Goal indicators and to improve capacity-building activities in countries for the production of the indicators. The report also describes the activities of the Inter-Agency and Expert Group and the United Nations Statistics Division to prepare the 2008 progress reports and related outputs on Millennium Development Goals to inform the public and policymakers on progress towards the goals. The annexes of the report contain an assessment of data availability in the Millennium Development Goal indicators database (annex I) and information on data availability in the database, by coverage and nature of data (annex II).

II. Improving data quality and transparency of methods

4. In November 2007, at its 12th session, the Inter-Agency and Expert Group agreed on a set of recommendations to improve coordination within national statistical systems and their reporting mechanisms to the international agencies, in an effort to reduce data gaps and data discrepancies between national and international sources. It also recommended that the United Nations Statistics Division should continue to carry out the survey on countries' coordination of statistical systems and reporting to the international agencies, and that countries' experiences in coordination and reporting mechanisms should be reviewed with a view to identifying best practices and developing guidelines for countries.

[1] *Official Records of the Economic and Social Council, 2008, Supplement No. 4* (E/2008/24-E/CN.3/2008/34), chap. I.B, decision 39/114.

5. The Inter-Agency and Expert Group also agreed that steps should be undertaken to reduce the gaps in data availability for both international and national monitoring and inconsistencies between the data available in national sources and used for national monitoring and the ones available in international data series and used for global monitoring. In this context, the United Nations Statistics Division engaged in a series of workshops to bring together representatives of national statistical systems and experts from international agencies tasked with the compilation of the international data series for Millennium Development Goal indicators, to review existing data gaps and differences between national and international data sets, identify the underlying causes and recommend appropriate actions to resolve these gaps and inconsistencies. The first of such events, held in May in Kampala, hosted by the Uganda Bureau of Statistics, brought together representatives from 16 national statistical offices and representatives from the Economic Commission for Africa, the United Nations Children's Fund, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank, some members of the academia and officers from other national governmental agencies and bilateral donors. The meeting agreed on a series of recommendations to improve Millennium Development Goals monitoring as described below.

6. On the functions of the national statistical offices, recommendations focused on strengthening the role of the national statistical offices as the coordinating body for the national statistical system and for verifying and validating data and data sources for the Millennium Development Goals. The group also recommended that national statistical offices should strengthen their role in providing technical support to line ministries and in the work with national authorities, in order to prioritize Millennium Development Goal indicators based on their relevance to national circumstances.

7. Participants also reviewed and made recommendations on ways to resolve discrepancies between national and international monitoring. In particular they recommended that: (a) countries should be involved in the development of concepts, definitions and methodology and in setting up guidelines for the production of Millennium Development Goal indicators, and national statisticians should be consulted before estimates are released; (b) international organizations should ensure that countries develop the capacity to make national definitions consistent with the international recommendations; and (c) national statistical offices should make efforts to harmonize definitions and classifications across the national statistical system, over time and between national and subnational data sets, and ensure that methodological development is consistent with the requirements for the production of Millennium Development Goal indicators.

8. Participants also agreed that, in order to ensure the availability of the necessary data, two key data collection tools needed to be strengthened: (a) civil registration and vital statistics systems were to be developed; and (b) the use of integrated household survey programmes was to be promoted.

9. Finally, to ensure that the necessary data are regularly produced by national statistical systems, the meeting recommended that adequate financial resources should be made available through basket funding and the improved effectiveness of aid delivery that would enable countries to prioritize their activities according to their national needs.

10. A programme similar to the one carried out for African countries is scheduled to be conducted in Bangkok, hosted by the Economic Commission for Asia and the Pacific (ESCAP), to address the needs of countries in Asia and the Pacific. National statisticians and representatives of line ministries are participating from over 20 countries. Experts from several international agencies are expected to participate to review metadata and national sources, review and discuss estimates and their methodology, and identify best practices for subnational monitoring.

11. With the main purpose of improving the collation, availability and dissemination of Millennium Development Goals data, the United Nations Statistics Division has also embarked on a new project, currently in its pilot phase. The project aims at achieving improvements in two areas: (a) understanding and reconciling discrepancies between country and international Millennium Development Goals data; and (b) strengthening the existing data-transfer mechanisms within country among the various data producers and between country data producers and international agencies. Desk research and country missions have already been conducted in four pilot countries, United Republic of Tanzania, Cambodia, Liberia and Bolivia, with a fifth country mission to be undertaken to Morocco in January 2009. The project is expected to be scaled up to cover a larger number of countries in the next three to five years.

A. Activities of Inter-Agency and Expert Group members for the improvement of data for Millennium Development Goal indicators

12. All Inter-Agency and Expert Group members have embarked on activities to improve the availability and quality of data for Millennium Development Goal indicators. This work has generally focused on improving access to the metadata and guidelines for the production of Millennium Development Goal indicators and providing training tools and programmes to national statisticians. The following are a few examples of what has been done during the last year.

13. The International Telecommunication Union (ITU), within the framework of the Partnership on Measuring ICT for Development, has assisted national statistical offices in collecting data on access to and use of information and communications technologies (ICTs) by households and individuals. ITU is also currently finalizing a Statistical Manual to guide national statistical offices in carrying out household and individual surveys to collect ICT data. A first edition of this Manual is expected to be available in early 2009.

14. The Food and Agriculture Organization of the United Nations (FAO) has regularly conducted country and regional training to build capacity in the production of food security statistics, including Millennium Development Goal indicator 1.9 on food deprivation. In 2008, the last of a series of regional training workshops covering all regions was held in San José, Costa Rica, for countries in Latin America and the Caribbean. Capacity-building activities are also conducted at the country level as part of technical assistance project with financial support from bilateral and multilateral donors, including, for example: in Armenia, Azerbaijan, Burkina Faso, Cambodia, Cape Verde, Georgia, Haiti, Kenya, the Lao People's Democratic Republic, Malawi, the Republic of Moldova, Mozambique, Palestine and the Philippines, among others.

15. Regular consultation with countries are conducted by the UNESCO Institute of Statistics (UIS) to inform countries on how national figures are adjusted and disseminated by UIS (including on the underlying data used for the calculation of the indicators). This practice has proved successful in reducing misunderstandings concerning differences between national and international data. UIS also regularly conducts regional workshops. In 2008, UIS organized a regional workshop for Central and Western Africa, in collaboration with Paris21, the Partnership in Statistics for Development in the 21st Century. Another regional workshop was conducted in Bangkok for South Asia, South-East Asia and the Pacific. In the first week of December 2008, UIS conducted a regional workshop in Paris for Eastern Europe and Central Asia.

16. In order to build national capacity for effective monitoring, the World Health Organization (WHO)/UNICEF Joint Monitoring Programme on water supply and sanitation — the official United Nations mechanism for monitoring progress towards Goal 7c — has organized a series of inter-country workshops in different regions. The aim of these workshops is (a) to enhance mutual understanding of monitoring methods used by countries and by the Programme, and (b) to achieve better understanding of the range of data needs and uses by different stakeholders. Since 2007, workshops have been held in Abuja and Nairobi for Anglophone countries in West and East Africa, and in Kathmandu for South-East Asian countries. Two further workshops were held in Panama for Central American countries in November 2008 and one in Mali for francophone African countries in December 2008. Where possible, the Joint Monitoring Programme follows these inter-country workshops with national seminars, with the aim of starting a national process bringing together representatives of the national statistical office and the water and sanitation sector to strengthen coordination of all stakeholders.

17. In 2008, the Geneva Millennium Development Goal-Trade group (International Trade Centre/United Nations Conference on Trade and Development/World Trade Organization) has updated the Millennium Development Goal-Trade website and included a revised version of the metadata and methodological notes in a continuous effort to provide tools for the production and use of trade indicators. While the work on supplementary indicators is still in progress, two indicators have already been published.

18. The International Labour Organization (ILO) has continued to give priority to technical cooperation activities, advisory services and training which (a) improve the quality of labour statistics derived from various sources, especially from labour force surveys, establishment surveys and censuses, and (b) enhance the harmonization and comparability of indicators. It has also provided technical assistance to a number of national statistical offices in the design of survey questionnaires to capture information on various labour concepts defined by the International Conferences of Labour Statisticians, on the survey and sample designs (including sample rotation schemes), and on the analysis of data from labour force surveys and other sources.

B. Implementation of the Statistical Data and Metadata Exchange for data and metadata exchange within the Inter-Agency and Expert Group

19. The Inter-Agency and Expert Group has devoted increased attention to ensure the achievement of the desired levels of consistency and transparency in reporting and presenting data and metadata for international monitoring. In this respect, the Group agreed that the adoption of the common platform for data exchange, the Statistical Data and Metadata Exchange (SDMX) would be a good technical solution to this issue. In 2007, the Group established a task team on SDMX, with the objective of developing the data structure for Millennium Development Goal indicators to be used in data and metadata exchange among agencies. The team has finalized the data structure for Millennium Development Goal indicators and created a registry to be maintained by the United Nations Statistics Division on Millennium Development Goal indicators that will be used by agencies for their regular data and metadata exchange on the indicators. A training session on the use of a SDMX-Millennium Development Goals Registry was organized for all interested members of the SDMX-Millennium Development Goals Task Team. The Task Team also agreed to hold a workshop before the upcoming Inter-Agency and Expert Group spring meeting in March 2009 for agencies to share experiences in the implementation of SDMX and provide training on the development and use of tools to those who have not yet been able to implement SDMX. The Task Team will present its work at the upcoming second SDMX Global Conference that will take place from 19 to 21 January 2009 in Paris.

20. Once the SDMX data structure for Millennium Development Goal indicators and the Registry are well established, the Task Team will include in the discussion a few experts from countries with a view to extending this platform to national statistical systems. Countries within the Inter-Agency and Expert Group will be the first ones to be involved in the initiative. An expert group meeting with representatives from national statistical systems will be held in the spring of 2009. Their involvement and inputs will be crucial to ensure the achievement of the ultimate objective of implementing SDMX, which is to facilitate data exchange across countries, within regions and subregions, and between national and international statistical systems.

C. Improvement of the metadata on Millennium Development Goal indicators for global monitoring

21. All metadata for the Millennium Development Goal indicators series presented in the Millennium Development Goal indicators database were revised and edited, following the recommendations of country experts, members of the Inter-Agency and Expert Group and with inputs provided by all concerned international agencies. Currently, there are only seven series for which metadata were not provided, and four of these are series for which data are not available (series related to malaria, fish stocks, and access to essential drugs).

22. The Inter-Agency and Expert Group has also continued to work to help ensure that countries have access to the necessary tools to monitor the Millennium Development Goals at the national level. In particular, the Group has agreed to produce a revised version of the Handbook on Millennium Development Goal Indicators, which will also be available online in an interactive format. The new

manual will be better tailored to the specific country needs for monitoring, and will include practical examples. It will also cover all the new indicators being introduced after the first edition was issued and reflect the refinement in the definitions and methods for Millennium Development Goal indicators that occurred over the last few years. The first draft of the manual will be reviewed by the Inter-Agency and Expert Group in spring 2009 and then discussed with country representatives at the Group's fall meeting. The draft will be first issued online only, to allow time for further review by users, and then printed at the beginning of 2010.

III. Review data and methodologies to monitor Millennium Development Goals

23. The Inter-Agency and Expert Group has initiated a review of issues related to the use of the indicators to assess progress in all areas covered by the Millennium Development Goals. In particular, countries and international agencies within the Group, and UNSD in its role as coordinator of the Group, have considered the following:

(a) The need to give greater consideration to the improvement of countries' capacity to produce the indicators and develop recommendations on ways to improve statistical capacity-building in countries;

(b) The need to develop tools to assess progress in the various goals and targets at the national level;

(c) The need for indicators to be disaggregated within countries to inform policies on Millennium Development Goals and related monitoring of progress at the subnational level;

(d) The need to supplement official indicators with some background series to better understand outcome in the various areas covered by the Millennium Development Goals;

(e) The need to better define concepts and definitions of existing indicators to improve their use at the national and international levels.

24. The Inter-Agency and Expert Group on Millennium Development Goal Indicators, at its fourteenth session, held from 28 to 30 October 2008, focused on the issues listed above and produced the following major outcomes: reviewed the methodology and data used to produce the new poverty estimates; discussed ongoing projects to address the differences between national and international data and identified concrete steps to be undertaken by national statistical offices and international agencies to reduce these discrepancies; discussed strategies to improve the availability of reliable Millennium Development Goal data at the subnational level; discussed ways to improve the monitoring of Goal 8 at the national level; reviewed the proposed content and structure of the revised version of the Handbook on Millennium Development Goals Indicators and other tools for national monitoring.

25. With respect to the improvement of data availability at both the national and international levels and the reduction of the inconsistencies between national and international data, the meeting made a number of recommendations related to the establishment of a coordinating body within the country to facilitate the reporting to the international system and harmonize the use of metadata across the various national agencies. It also recommended that the new Handbook on Millennium

Development Goals Indicators be widely disseminated and used, especially through regional and national workshops, and that international agencies disseminated their metadata to national statistical offices.

26. In order to improve the availability of reliable subnational data, participants recommended to expand the use of administrative data, generate estimates at the subnational level with mapping techniques and combine different sources and use small area estimation techniques. It also agreed that it was important to engage local governments in the production of statistics and harmonize data systems at the subnational level. Finally, participants requested that the United Nations Statistics Division provide opportunities for training in this area and for sharing experiences with countries that have already conducted subnational analysis and monitoring.

27. In order to improve the national monitoring of Goal 8, the Group recommended strengthening country capacity to measure ICT, including preparing a technical manual and assisting countries in conducting ICT surveys or in the inclusion of ICT questions in ongoing surveys. It also recommended clarifying the definition of the indicator on access to drugs and strengthening national service delivery surveys, including the monitoring of access to drugs. The Group also reviewed the work by the International Trade Centre in trying to find better indicators to estimate trade development and its impact. Finally, it was stressed that at the country level, all aid received by the country and ministries should be monitored, that national statistical offices should pay more attention to the production of debt and other financial statistics, and that the statistical capacity of the ministries of finance should be strengthened.

28. The Group agreed on the way forward for both international agencies and national statistical offices as follows:

(a) Continuing the work to reconcile the national and international monitoring and to identify best strategies to strengthen countries' capacity for monitoring development;

(b) Strengthening training tools available to countries, including the wide distribution of the new manual and the provision of training services;

(c) Providing specific training on subnational analysis and monitoring to allow countries to localize the Millennium Development Goals;

(d) Assessing the feasibility of expanding the survey normally extended to the Inter-Agency and Expert Group countries only, on reporting modalities, coordination and other issues relevant to national and international monitoring;

(e) Reviewing database platforms used by countries as central repository for national indicators with a view to streamlining and avoiding using multiple data systems;

(f) Assessing the feasibility of extending the use of SDMX to countries who wish to adopt it.

29. The Inter-Agency and Expert Group has also continued the review of methodologies for the production of Millennium Development Goal indicators and has addressed important methodological issues. One such issue relates to the use of population figures in the computation of the indicators and in the aggregation of national values to regional and global figures.

IV. Assessment of data availability on Millennium Development Goal indicators

30. Since the periodic assessment of progress towards the Millennium Development Goals began over seven years ago, the capacity of countries to produce and use the necessary statistics for their national monitoring and to report to the international system for global monitoring has been a preoccupation of the statistical community. Since 2006, the United Nations Statistics Division has monitored the availability and nature of the data provided by the international agencies for the global monitoring, and contained in the Millennium Development Goal indicators database (http://mdgs.un.org). This assessment has served as a way to both determine to what extent the regional aggregates used for the global monitoring reflect the actual situation around the world, and on the other hand as an indirect measure of countries' capacity to produce the necessary data.

31. Over the years, international agencies, regional commissions and other development partners have engaged in a number of initiatives to help developing countries to strengthen their statistical capacity to produce, analyse and disseminate data to monitor development. These activities, especially the increased dialogue between countries and international agencies within the Inter-Agency and Expert Group and in the various forums aimed at addressing countries' needs to improve national coordination and a better understanding of Millennium Development Goal metadata, have improved the availability of data for the monitoring of progress on the Goals. Table 1 presents the current status with regard to the availability of data to allow the assessment of trends, measured as the number of countries that have data before and after the year 2000 (at least one data point).[2] For more than half of the developing countries, the database contains trend data for 30 indicators or more, and almost a fourth of the countries have trend data for more than 40 indicators. On the other hand, just 11 countries have trend data for 10 indicators or less.

Table 1
Number of developing countries and territories in the Millennium Development Goal indicator database, by number of indicators for which trend analysis is possible[a]

Number of indicators for which trend analysis is possible	*Number of countries*	*Percentage of countries*
0-10	11	7
11-20	19	12
21-30	43	26
31-40	51	31
41-55	39	24
Total	**163**	**100**

[a] The criteria used to determine whether trend analysis is possible for a given indicator is that the country has data for the given indicator for at least one point before 2000 and one after 2000.

[2] A brief description of the methodology for the assessment of data availability in the Millennium Development Goal indicators database is presented as annex I. The complete results of the analysis are available on the website of the Statistical Commission at http://unstats.un.org/unsd/statcom/sc2009.htm.

32. There has certainly been improvement in data availability over the last few years. Table 2 shows changes in the availability of data for two points in time, between November 2005 and July 2008. In 2005, only one developing country had data for two points in time for more than 30 indicators. In July 2008, that number had reached 70. At the same time, the number of countries with trend data for only 0-10 indicators had decreased to about one third of what it was in 2005 — from 29 countries to 11.

Table 2
Number of developing countries and territories by number of indicators with at least two data points[a]

	Number of countries with data in the Millennium Development Goal indicators database			
	As of November 2005		*As of July 2008*	
Number of indicators with at least two data points	*Number of countries*	*Percentage of countries*	*Number of countries*	*Percentage of countries*
0-10	29	18	11	7
11-20	52	32	22	13
21-30	81	50	60	37
31-39	1	1	70	43
Total	**163**	**100**	**163**	**100**

[a] To allow comparison with the database in 2005, the two points in time considered in this table refer to any time, irrespective of whether it is before or after 2000.

33. Still, gaps remain in the availability and quality of data needed to effectively monitor progress in development and in particular in the Millennium Development Goals. This is particularly evident when the nature of the data contained in the database is analysed.

34. As agreed by the Inter-Agency and Expert Group in 2006, for each data point of the data series presented in the database (for every country and every year considered), the responsible agency provides the explanation of how the figures are obtained, in relation to the level of adjustment of the original country data the agency performs to obtain the desired level of international comparability or to resolve data quality issues. Country representatives and international agencies in the Inter-Agency and Expert Group agreed on the categories to be used to describe the nature of the data, as detailed in table 3 below. The assessment shown in the table indicates the nature of the data for the majority of countries in the database: an indicator is defined as being of a given category when the majority of the countries have data falling into that category. For a country to be designated as falling into a given category for the specific indicators, the majority of data points have to be in that category.[3]

[3] The category "country data" is an exception: when the country has data in the "country data" category for at least one data point, it is classified as "country data" for that specific indicator, following the rationale that in that case the country has the capacity to produce the indicator in adherence to international standards.

35. The majority of indicators are based on data from countries with no or minimum adjustment. There are, however, still 12 indicators for which the majority of data points need to be estimated by the international agency and 3 for which the availability of data is so scarce that most data points are derived through a model based on variables other than the one the indicator is measuring. The latter is the case, for instance, of the maternal mortality ratio, for which the necessary data — from complete civil registration and good attribution of causes of death — are rarely available in developing countries. A complete list of indicators under each category and related data availability is presented in annex II.

Table 3
Millennium Development Goal indicators by nature of the data available in the majority of countries[a]

	Millennium Development Goal indicators	
Nature of data	*Number*	*Percentage*
Country data	27	49
Country adjusted	4	7
Estimated	12	22
Modelled	3	5
Global monitoring data	6	11
Not available	3	5
Total	**55**	**100**

[a] The coding of the nature of the data is as follows:
C = country data. The figure is the one produced and disseminated by the country (including data adjusted by the country to meet international standards).
CA = country adjusted. The figure is the one produced and provided by the country, but adjusted by the international agency for international comparability — that is to comply with internationally agreed standards, definitions and classifications (age group, International Standard Classification of Education, etc.).
E = estimated. The figure is estimated by the international agency, when corresponding country data on a specific year or set of years are not available, or when multiple sources exist, or there are issues of data quality. Estimates are based on national data, such as surveys or administrative records, or other sources but on the same variable being estimated.
M = modelled. The figure is modelled by the agency when there is a complete lack of data on the variable being estimated. The model is based on a set of covariates — other variables for which data are available and that can explain the phenomenon.
G = global monitoring data. The figure is regularly produced by the designated agency for the global monitoring, based on country data. However, there is no corresponding figure at the country level, because the indicator is defined for international monitoring only (example: population below $1 a day).
NA = not available. The nature of the data is unknown or was not provided.

36. Another important aspect in the availability of data for Millennium Development Goal monitoring is that the latest data point should be recent enough to allow an assessment of progress after the Millennium Declaration was adopted and the new development policies and initiatives were implemented. Recent data are also indispensable to understand how far countries are from achieving the Millennium Development Goals, what resources are needed and what interventions

need to be put in place. From the analysis of the data contained in the Millennium Development Goals indicators database, as shown in table 4, it appears that the latest year for the large majority of indicators is 2005 or a later year. Encouragingly, for none of the indicators is the most recent year earlier than 2000. Although the coverage of recent years is good, there is not sufficient information over the last year or two to understand the impact of recent development initiatives or assess the effect of crises such as the recent increases in food prices, whose effect on the number of poor and on many other areas of the Millennium Development Goals will not be reflected in the data available for at least another year.

Table 4
Number of Indicators by latest available year in the Millennium Development Goal indicators database

Latest available years for the majority of countries	*Number of indicators*	*Percentage of indicators*
1990-1999	0	0
2000-2004	13	24
2005-2007	41	75
2008	1	2
Total	**55**	**100**

V. Understanding and resolving the differences between country data and international data series

37. More and better data have become available to monitor the Millennium Development Goals. Over the last two years, the United Nations Statistics Division, the regional commissions and the other member agencies of the Inter-Agency and Expert Group have intensified their work to improve the use of national data through the promotion of better coordination within national statistical systems, better use of internationally agreed standards by countries, and better reporting mechanisms from national agencies to the international statistical system. However, official national data remains underutilized and differences of indicator values between national and international sources remain evident for almost all indicators.

38. The United Nations regional commissions have recently carried out a comprehensive assessment of the differences in data availability and values between national and international sources. Major factors to which differences in values are attributable include:

(a) The definition and/or method of calculation in the country does not comply with the international standards used for the production of international data. As an illustration of this case, in the Economic and Social Commission for Western Asia region, the indicator "Proportion of 1-year-old children immunized against measles" is the "*The proportion of 1-year-old children (12-23 months) immunized against measles is the percentage of children under one year of age who have received at least one dose of measles vaccine*" was in some countries defined as "*Vaccination through injection given once at nine months of age to protect against measles*". And the indicator "Condom use rate of the contraceptive

prevalence rate", which is defined as "*The number of women aged 15-49 years in marital or consensual unions who are practicing contraception by using condoms as a proportion of all of women of the same age group in consensual unions who are practicing, or whose sexual partners are practicing, any form of contraception*" was computed nationally by some countries using as denominator only "*the total number of women aged 15-49 who are practicing any form of contraception*". The assessment conducted by ESCAP also reveals differences between national and international definitions. For instance, countries in the region often use their own definition of an improved water source or improved sanitation facility, which may be substantially different from the international definition and lead to very different values;

(b) International values are estimates produced by agencies. When data from countries are available from different sources and/or there are quality issues to be resolved, international figures produced by agencies are fitted values of regression lines based on all available data sources, generally including administrative records, census and survey data. On the other hand, national figures usually are derived from one specific data source only;

(c) Use of different population figures. This is the case for instance of education indicators. Besides adjustments needed to make up for differences in different educational classification systems and allow international comparability, the computation of these indicators require the use of population figures, which for international agencies are derived from the Population Division of the Secretariat estimates, while in countries are often national estimates.

39. Very similar findings resulted from the assessment conducted for Latin America and the Caribbean by the Economic Commission for Latin America and the Caribbean and for European and Central Asian countries by the Economic Commission for Europe. Also the same results were obtained through the case studies undertaken within the recently initiated United Nations Statistics Division project (see para. 10 above) in the first two pilot countries — United Republic of Tanzania and Cambodia — and from the assessment of data discrepancies carried out at the workshop for the 16 African countries held in Uganda in May 2008 (see para. 5 above).

40. Many of the differences identified are well understood and acceptable, since a certain degree of adjustment will always be necessary if data are to be compared across countries and aggregated to produce global and regional figures necessary for the assessment of global Millennium Development Goal trends. Also, figures used for national monitoring and to inform the national policies and interventions legitimately need to be different when indicators are defined in a different way from the international standards to suit national specific needs and circumstances. In all other cases, the United Nations Statistics Division, regional commissions and all other agencies will continue the work initiated two years ago to assist countries in achieving a more efficient reporting to the international system and in fostering a dialogue and collaboration between international and national data producers.

VI. Outputs by the Inter-Agency and Expert Group in 2008

41. Based on the inputs provided by the various responsible agencies, the Department of Economic and Social Affairs of the Secretariat published *The Millennium Development Goals Report 2008*. The report was launched in September

2008 by the Secretary-General and used to inform the political debate of the General Assembly on the Millennium Development Goals and as an official document for the High-Level Event on the Millennium Development Goals, held in New York on 25 September. The report was translated into all the official languages and also launched at regional and subregional events in various countries around the world.

42. The assessment of progress based on regional aggregates was also presented in the Millennium Development Goals: 2008 Progress Chart. The colour-coded chart, produced for the fifth consecutive year, presents an assessment of regional trends and indicates regions and subregions that are on- or off-track to achieve the goals. In addition, a progress chart was produced presenting countries within each region according to their degree of progress towards the achievement of the Goals. The assessment is based on statistics from 1990 until the latest year for which data are available. A progress report was also prepared on progress towards gender equality and the empowerment of women in the developing regions. The report covers the gender dimensions of all eight development Goals.

43. The United Nations Statistics Division also prepared data and analysis to inform the 2008 report of the Secretary-General to the General Assembly on the work of the organization and the statistical annex that was presented as an annex to the report.[4] The Division has also continued to maintain the website and database of the Inter-Agency and Expert Group on Millennium Development Goals indicators (http://mdgs.un.org).

44. In September 2008, the Statistics Division, in collaboration with the DevInfo group issued the fourth edition of MDGInfo, an off-line version of the database, using the DevInfo platform, a technology specifically designed to support Governments in Millennium Development Goal monitoring. MDGInfo is intended to facilitate the access to the database and the Millennium Development Goal Report to users with limited access to internet.

VII. Conclusions and way forward

45. **The Commission may wish to take note of the work done by the Inter-Agency and Expert Group and the United Nations Statistics Division during 2008 in implementing the recommendations contained in Economic and Social Council resolution 2006/6 and the requests made by the Statistical Commission at its thirty-ninth session, on the improvement of data and indicators to monitor the Millennium Development Goals.**

46. **The Commission may also wish to comment on the proposed next steps:**

(a) **Continuing the work to reconcile the national and international monitoring, focusing in particular on the development of recommendations and guidelines for countries to improve their national coordination and reporting systems;**

(b) **Strengthening training tools available to countries, including the wide distribution of the new Handbook on Millennium Development Goal Indicators and the regular provision of training services;**

(c) **Providing specific training on subnational analysis and monitoring to allow countries to better localize the Millennium Development Goals.**

[4] *Official Records of the General Assembly, Sixty-third Session, Supplement No. 1* (A/63/1).

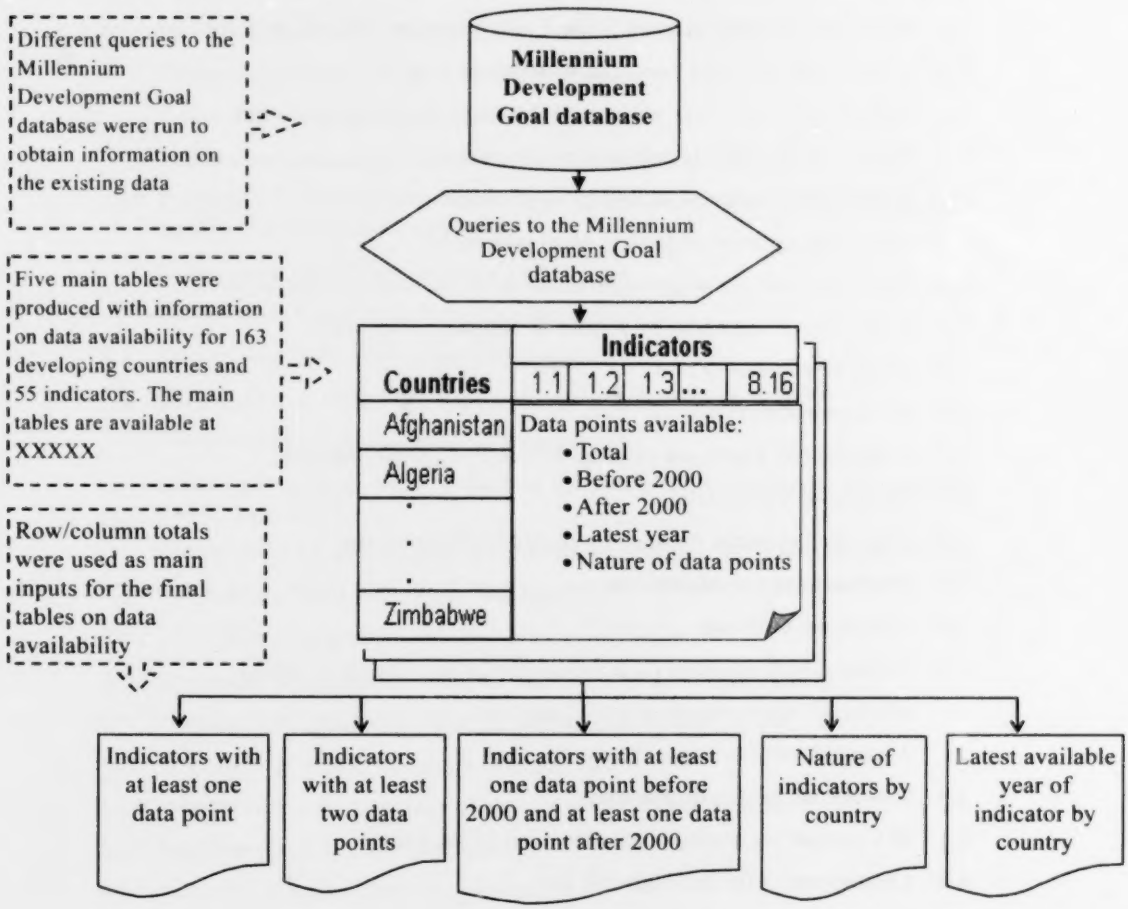
Annex I

Assessment of data availability in the Millennium Development Goal indicators database

A total of 55 indicators were included in the analysis of data availability (see list A below). The analysis considered all 163 developing countries included in the database (see http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Data/RegionalGroupings.htm for a list of developing countries). The comparison between data available in 2005 and 2008 was carried out considering 39 indicators out of the 55.

The analysis is based on the information available at the time the MDG Indicators Database was last updated — July 2008. The only exception is represented by indicators 1.1 Proportion of population below $1 purchasing parity power (PPP) per day, and 1.2 Poverty gap ratio, which were updated in November 2008.

The following chart describes the steps followed to process the information:


Different queries to the Millennium Development Goal database were run to obtain information on the existing data
Millennium Development Goal database
Queries to the Millennium Development Goal database
Five main tables were produced with information on data availability for 163 developing countries and 55 indicators. The main tables are available at XXXXX
Indicators
Countries
1.1
1.2
1.3
...
8.16
Afghanistan
Algeria
Zimbabwe
Data points available:
• Total
• Before 2000
• After 2000
• Latest year
• Nature of data points
Row/column totals were used as main inputs for the final tables on data availability
Indicators with at least one data point
Indicators with at least two data points
Indicators with at least one data point before 2000 and at least one data point after 2000
Nature of indicators by country
Latest available year of indicator by country

List A. Millennium Development Goal indicators included in data availability analysis

1.1 Proportion of population below $1 (PPP) per day

1.2 Poverty gap ratio

1.3 Share of poorest quintile in national consumption

1.4 Growth rate of gross domestic product (GDP) per person employed

1.5 Employment-to-population ratio

1.6 Proportion of employed people living below $1 (PPP) per day

1.7 Proportion of own-account and contributing family workers in total employment

1.8 Prevalence of underweight children under five years of age

1.9 Proportion of population below minimum level of dietary energy consumption

2.1 Net enrolment ratio in primary education

2.2 Proportion of pupils starting grade 1 who reach last grade of primary

2.3 Literacy rate of 15-24 year olds, women and men

3.1 Ratio of girls to boys in primary, secondary and tertiary education

Gender Parity Index in primary-level enrolment

Gender Parity Index in secondary-level enrolment

Gender Parity Index in tertiary-level enrolment

3.2 Share of women in wage employment in the non-agricultural sector

3.3 Proportion of seats held by women in national parliament

4.1 Under-five mortality rate

4.2 Infant mortality rate

4.3 Proportion of 1-year-old children immunized against measles

5.1 Maternal mortality ratio

5.2 Proportion of births attended by skilled health personnel

5.3 Contraceptive prevalence rate

5.4 Adolescent birth rate

5.5 Antenatal care coverage (at least one visit and at least four visits)

Antenatal care coverage, at least four visits

Antenatal care coverage, at least one visit

5.6 Unmet need for family planning

6.1 HIV prevalence among population aged 15-24 years

6.2 Condom use at the last high-risk sex

Condom use at last high-risk sex, 15-24 years old, men

Condom use at last high-risk sex, 15-24 years old, women

Condom use to overall contraceptive use among currently married women 15-49 years old

6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS

Men 15-24 years old with comprehensive correct knowledge of HIV/AIDS

Women 15-24 years old with comprehensive correct knowledge of HIV/AIDS

6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years

6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs

6.7 Proportion of children under 5 sleeping under insecticide-treated bednets

6.8 Proportion of children under 5 with fever who are treated with appropriate antimalarial drugs

6.9 Incidence, prevalence and death rates associated with tuberculosis

Tuberculosis death rate per 100,000 population

Tuberculosis incidence per 100,000 population

Tuberculosis prevalence rate per 100,000 population

6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)

Tuberculosis detection rate under DOTS

Tuberculosis treatment success rate under DOTS

7.1 Proportion of land area covered by forest

7.2 Carbon dioxide emissions, total, per capita and per $1 GDP (PPP)

7.3 Consumption of ozone-depleting substances

Consumption of all ozone-depleting substances in ozone depletion potential (ODP) metric tons

Consumption of ozone-depleting chlorofluorocarbons (CFCs) in ODP metric tons

7.5 Proportion of total water resources used

7.6 Proportion of terrestrial and marine areas protected

7.8 Proportion of population using an improved drinking water source

7.9 Proportion of population using an improved sanitation facility

7.10 Proportion of urban population living in slums

8.12 Debt service as a percentage of exports of goods and services

8.14 Telephone lines per 100 population

8.15 Cellular subscribers per 100 population

8.16 Internet users per 100 population

Annex II

Data availability in the Millennium Development Goal indicators database, by coverage and nature of data

Millennium Development Goals indicator		Countries with at least 1 data point		Countries with at least 2 data points		Countries with at least 1 data point before 2000 and 1 data point after 2000		Nature of data[a]
		Number	Percentage	Number	Percentage	Number	Percentage	
C = country data								
1.7	Proportion of own-account and contributing family workers in total employment	77	47	57	35	47	29	C
1.8	Prevalence of underweight children under five years of age	116	71	94	58	84	52	C
2.1	Net enrolment ratio in primary education	139	85	124	76	109	67	C
2.2	Proportion of pupils starting grade 1 who reach last grade of primary	124	76	103	63	91	56	C
2.3	Literacy rate of 15-24 year olds, women and men	119	73	101	62	74	45	C
3.1	Ratio of girls to boys in primary, secondary and tertiary education							
	Gender Parity Index in primary-level enrolment	146	90	143	88	133	82	C
	Gender Parity Index in secondary-level enrolment	146	90	140	86	127	78	C
	Gender Parity Index in tertiary-level enrolment	124	76	115	71	89	55	C
3.2	Share of women in wage employment in the non-agricultural sector	154	94	97	60	72	44	C
3.3	Proportion of seats held by women in national parliament	134	82	134	82	126	77	C
5.3	Contraceptive prevalence rate	122	75	99	61	84	52	C
5.4	Adolescent birth rate	160	98	153	94	145	89	C
5.5	Antenatal care coverage (at least one visit and at least four visits)							
	Antenatal care coverage, at least four visits	56	34	0	0	0	0	C
5.6	Unmet need for family planning	72	44	54	33	49	30	C
6.2	Condom use at the last high-risk sex							
	Condom use at last high-risk sex, 15-24 years old, men	39	24	19	12	13	8	C
	Condom use at last high-risk sex, 15-24 years old, women	49	30	23	14	14	9	C
	Condom use to overall contraceptive use among currently married women 15-49 years old	120	74	95	58	81	50	C
6.3	Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS							
	Men 15-24 years old with comprehensive correct knowledge of HIV/AIDS	38	23	9	6	1	1	C
	Women 15-24 years old with comprehensive correct knowledge of HIV/AIDS	64	39	9	6	1	1	C
6.4	Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years	58	36	34	21	24	15	C

Millennium Development Goals indicator	*Countries with at least 1 data point*		*Countries with at least 2 data points*		*Countries with at least 1 data point before 2000 and 1 data point after 2000*		*Nature of data*[a]
	Number	*Percentage*	*Number*	*Percentage*	*Number*	*Percentage*	
6.7 Proportion of children under 5 sleeping under insecticide-treated bednets	45	28	21	13	2	1	C
6.8 Proportion of children under 5 with fever who are treated with appropriate antimalarial drugs	48	29	24	15	5	3	C
7.3 Consumption of ozone-depleting substances							
Consumption of all ozone-depleting substances in ODP metric tons	136	83	136	83	136	83	C
Consumption of ozone-depleting chlorofluorocarbons in ODP metric tons	136	83	136	83	136	83	C
7.5 Proportion of total water resources used	117	72	58	36	56	34	C
7.1 Proportion of land area covered by forest	155	95	155	95	155	95	C
6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)							
Tuberculosis treatment success rate under DOTS	146	90	145	89	130	80	C
CA = country adjusted							
5.2 Proportion of births attended by skilled health personnel	140	86	124	76	105	64	CA
5.5 Antenatal care coverage (at least one visit and at least four visits)							
Antenatal care coverage, at least one visit	96	59	92	56	79	48	CA
6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs	90	55	89	55	0	0	CA
8.12 Debt service as a percentage of exports of goods and services	106	65	106	65	98	60	CA
E = estimated							
1.4 Growth rate of GDP per person employed	114	70	114	70	114	70	E
1.5 Employment-to-population ratio	125	77	125	77	125	77	E
4.1 Under-five mortality rate	138	85	138	85	138	85	E
4.2 Infant mortality rate	138	85	138	85	138	85	E
4.3 Proportion of 1-year-old children immunized against measles	139	85	139	85	136	83	E
6.1 HIV prevalence among population aged 15-24 years	101	62	101	62	0	0	E
6.9 Incidence, prevalence and death rates associated with tuberculosis							
Tuberculosis incidence per 100,000 population	154	94	154	94	154	94	E
7.6 Proportion of terrestrial and marine areas protected	156	96	156	96	154	94	E
7.8 Proportion of population using an improved drinking water source	142	87	142	87	137	84	E
7.9 Proportion of population using an improved sanitation facility	137	84	137	84	131	80	E
7.10 Proportion of urban population living in slums	108	66	105	64	105	64	E
6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS)							
Tuberculosis detection rate under DOTS	148	91	145	89	125	77	E

Millennium Development Goals indicator	Countries with at least 1 data point		Countries with at least 2 data points		Countries with at least 1 data point before 2000 and 1 data point after 2000		Nature of data[a]
	Number	Percentage	Number	Percentage	Number	Percentage	
M = modelled							
5.1 Maternal mortality ratio	120	74	0	0	0	0	M
6.9 Incidence, prevalence and death rates associated with tuberculosis							
Tuberculosis death rate per 100,000 population	154	94	154	94	154	94	M
Tuberculosis prevalence rate per 100,000 population	154	94	154	94	154	94	M
G = global monitoring data							
1.1 Proportion of population below $1 (PPP) per day	89	55	68	42	67	41	G
1.2 Poverty gap ratio	89	55	68	42	67	41	G
1.3 Share of poorest quintile in national consumption	82	50	62	38	51	31	G
1.6 Proportion of employed people living below $1 (PPP) per day	71	44	56	34	46	28	G
1.9 Proportion of population below minimum level of dietary energy consumption	121	74	121	74	121	74	G
7.2 Carbon dioxide emissions, total, per capita and per $1 GDP (PPP)	150	92	150	92	148	91	G
NA = not available							
8.14 Telephone lines per 100 population	156	96	156	96	155	95	NA
8.15 Cellular subscribers per 100 population	156	96	156	96	156	96	NA
8.16 Internet users per 100 population	156	96	152	93	149	91	NA

Abbreviations: CFCS = chlorofluorocarbons, GDP = gross domestic product, ODP = ozone depletion potential, PPP = purchasing power potential.

[a] The coding of the nature of the data is as follows:

C = country data. The figure is the one produced and disseminated by the country (including data adjusted by the country to meet international standards).

CA = country adjusted. The figure is the one produced and provided by the country, but adjusted by the international agency for international comparability — that is to comply with internationally agreed standards, definitions and classifications (age group, International Standard Classification of Education, etc.).

E = estimated. The figure is estimated by the international agency, when corresponding country data on a specific year or set of years are not available, or when multiple sources exist, or there are issues of data quality. Estimates are based on national data, such as surveys or administrative records, or other sources but on the same variable being estimated.

M = modelled. The figure is modelled by the agency when there is a complete lack of data on the variable being estimated. The model is based on a set of covariates — other variables for which data are available and that can explain the phenomenon.

G = global monitoring data. The figure is regularly produced by the designated agency for the global monitoring, based on country data. However, there is no corresponding figure at the country level, because the indicator is defined for international monitoring only (example: population below $1 a day).

NA = not available. The nature of the data is unknown or was not provided.